

The PDT, AP and Committee reviewed the research priorities approved for FY2012 (attached) and made several recommendations for changes for the 2013 and 2014 priorities (tracked changes).

The attached list of priorities are the final recommendation of the Scallop Committee from the April 5, 2012 meeting.

Several modifications were suggested (in underlined text):

1. Revise the turtle research bullet and move it from High priority to Medium priority.
2. Leave the first bullet as a high priority, but add another high priority item: *Biomass surveys of current open or closed areas that may in the future be considered for scallop access areas.*
3. Keep the bycatch related priority as HIGH - *Identification and evaluation of methods to reduce bycatch.*
4. Update some of the language to further clarify some of the priorities and eliminate priorities that are repetitive or outdated.

Research Priorities approved in Framework 22 for 2012

Research priorities for ~~2012 and 2013~~ 2013 and 2014

HIGHEST PRIORITIES (not listed in order of importance):

- An intensive industry-based survey of each of the existing access areas (~~access areas in Georges Bank including~~ Closed Area I, Closed Area II, ~~and~~ Nantucket Lightship, ~~as well as~~ Delmarva, ~~and~~ Hudson Canyon, ~~and Great South Channel, if approved~~). The primary deliverable of these surveys can then be used ~~would be~~ to estimate total allowable catches (TACs) under the rotational area management program if the data from these surveys are available by August of the prior fishing year.
- Identification and evaluation of methods to reduce the impact of the scallop fishery with respect to bycatch of all managed species. This would include including projects that determine seasonal bycatch rates, characterize spatial and temporal distributional patterns as well as the associated discard mortality rates of yellowtail flounder, and other key bycatch species.
- An intensive industry-based survey of areas that may be candidate access areas in the future (i.e. open areas with high scallop recruitment or closed areas that may open to fishing in the future such as groundfish mortality closed areas or current habitat closed areas).
- ~~Research to support the assessment of the loggerhead turtle population in the Mid-Atlantic (i.e. satellite tagging and investigation of seasonal movements, etc.); identification of sources of sea turtle interactions and/or identification of ways to minimize interactions with sea turtles. Priority topics identified include development and monitoring of scallop dredge and trawl operations that would reduce or eliminate the threat or harm of sea turtle interactions. Other issues related to sea turtle research include, but are not limited to: gear modifications or fishing techniques that may be used to reduce or eliminate the threat of sea turtle interactions without unacceptable reduction in scallop retention, using available and appropriate technology to quantify the extent that gear modifications reduce turtle mortalities, and turtle behavior.~~

MEDIUM PRIORITY (not listed in order of importance):

- Other resource surveys, to expand and/or enhance survey coverage in areas that have the potential to be important resource areas, but currently have a lack of comprehensive survey coverage. ~~the NMFS annual dredge survey including open areas and determine NMFS survey dredge efficiency in those other resource areas~~
- Research to support the investigation of the loggerhead turtle behavior in the Mid-Atlantic (via satellite tagging or other means) to understand their seasonal movements, vertical habitat utilization, and how and where interactions with dredge gear are occurring. This priority topic also includes monitoring of scallop dredge and trawl operations, and the development of further gear modifications if monitoring should indicate current designs are not eliminating the threat or harm to sea turtles or are resulting in unacceptable scallop catch loss.
- ~~Scallop biology, Studies specifically studies~~ aimed at addressing issues that were identified as research priorities at the latest assessment: i.e. understanding incidental gear mortality, discard mortality and seasonal growth of scallops.

OTHER PRIORITIES (not listed in order of importance):

- Other sScallop biology projects, including studies aimed at understanding recruitment processes (reproduction, larval and early post-settlement stages), growth, and natural mortality (including predation and disease).

- ~~Identification and evaluation of methods to reduce habitat impacts, including, but not limited to: broader i~~Investigation of variability in dredging efficiency across habitats, times, areas, and gear designs to allow for more accurate quantitative estimates of scallop dredge impacts on the seabed; and ~~research on habitat effects from scallop fishing and~~ development of practicable methods to minimize or mitigate those impacts.
- Habitat characterization research including, but not limited to: video and/or photo transects of the bottom within scallop access areas and within closed scallop areas and in comparable fished areas that are both subject and not subject to scallop fishing before and after scallop fishing commences (BACI or before after control impact dredge impact studies); development of high-resolution sediment mapping of scallop fishing areas using Canadian sea scallop industry mapping efforts as an example process; identification of nursery and over-wintering habitats of species that are vulnerable to habitat alteration by scallop fishing; and other research that relates to habitats affected by scallop fishing, including, but not limited to, long-term or chronic effects of scallop fishing on marine resource productivity, other ecosystem effects, habitat recovery potential, and fine scale fishing effort in relation to fine scale habitat distribution. In particular, projects that directly support evaluation of present and candidate EFH closures ~~and HAPCs~~ to assess whether these areas are accomplishing their stated purposes and to assist better definition of the complex ecosystem processes that occur in these areas.
- ~~Improved information concerning scallop abundance and evaluation of the distribution, size composition, and density of scallops, including but not limited to: efforts to develop a cooperative industry-based resource survey, high-resolution surveys that include distribution, biomass of exploitable size scallops, recruitment, mortality, and growth rate information, research that provides more detailed scallop life history information (especially on age and area-specific natural mortality and growth) and to identify stock-recruitment relationships, intensive sampling on both sides of access boundaries for fishing year 2007 and in subsequent years to gauge the short and long-term effects of fishing on the resource.~~
- Scallop and area management research, including but not limited to: evaluation of ways to control predation on scallops; research to actively manage spat collection and seeding of sea scallops; social and economic impacts and consequences of closing areas to enhance productivity and improve yield of sea scallops and other species; and estimation of factors affecting fishing power for each limited access vessel.
- ~~If a habitat research area is identified in a future action, allow RSA funds to be used for projects to enhance scallop production using rotational strategies.~~
- Develop methodologies or alternative ways for the scallop fleet to collect and analyze catch and bycatch data on a near real-time basis (i.e. collection of scallop meat weight and quality data, specific bycatch information, etc. Potential ideas include but are not limited to: concepts like a "Study fleet" concept, electronic monitoring, dockside monitors, bag tags, etc.).
- ~~Continue scallop dredge environmental impact studies.~~

